

# FOLIO

UNIVERSITY OF ALBERTA  
29 JANUARY 1993



## INSIDE

- Many hands at work on hybrid electric vehicle
- Intertwining ethics and genetic engineering
- Heady times for first PhD graduate in Mining Engineering

## GFC endorses two new measures to assess and support faculty teaching skills

Two new sections which will be added to the General Faculties Council Policy Manual will send potential faculty members and current faculty members the signal that the University of Alberta takes excellence in teaching seriously.

Approved by GFC at its regular meeting 18 January, the first new section advises Deans that they should direct all advisory selection committees or pre-selection committees to establish methods to examine and assess a candidate's teaching experience and/or teaching potential.

The second additional section states that during the probationary period, every teaching unit shall make efforts to work with the faculty member to assess teaching abilities and accomplishments. That assessment

should be guided by a desire to develop and nurture effective teaching skills and attitudes.

If problems are detected, the new staff member will be directed to sources, services, or persons who can provide assistance—either within the faculty or outside of it—and will be encouraged to take initiatives for improving his or her development as a teacher.

A number of Deans and Department Chairs were already doing these things, said Gretchen Hess, who chairs the GFC Committee for the Improvement of Teaching and Learning. "But we did not find that it was a universal policy across this campus and we believe very strongly that it should be."

Approving of the new sections, Vice-President (Academic) John McDonald said the proposals were considered at some length

by CITL and endorsed by Deans' Council in September.

"Personally, I think they're good changes, and they recognize our responsibilities to assess in a better way the teaching potential of candidates," the Vice-President said. The new sections also recognize that the University supports the teaching role in a better way.

"In many parts of the University this has been going on ... and in many parts of the University people are finding innovative ways of doing more," he said.

Dr Hess said teaching will be looked at during hiring and during the probationary period.

CITL members want to ensure that during the probationary period new appointees receive adequate support to develop their teach-

ing skills and that the instructor and University live up to their mutual obligations.

The two new policies are good ones, said Bente Roed, Education Director for University Teaching Services. "We take as a given that the people we hire have come to us with a set of skills and abilities. That's why we hire them in the first place. But what we want to do while they're with us is to make sure that the skills they have are being reinforced, that they are adding new skills to their repertoire and that they're encouraged to take risks."

"We have a one and a half day teaching orientation for new professors in place and that is certainly an important function. What that does is communicate to them that we value teaching and that we're prepared to spend time and money to support teaching."

## Electronic Oxford English Dictionary now on-line as a result of University-donor partnership

*University officials laud donors for their willingness to support project*

The electronic second edition of the *Oxford English Dictionary* is now available to students and faculty at the University of Alberta.

Scholars who have a computer connected to the campus network can now dial in to the electronic *OED* and do research.

At an inaugural ceremony held last Friday to honour donors and University staff who helped make the project possible and to demonstrate the powerful new research tool, Faculty of Arts Director of External Relations

and Fund Development Rob Merrett said the *OED* will help advance both teaching and research.

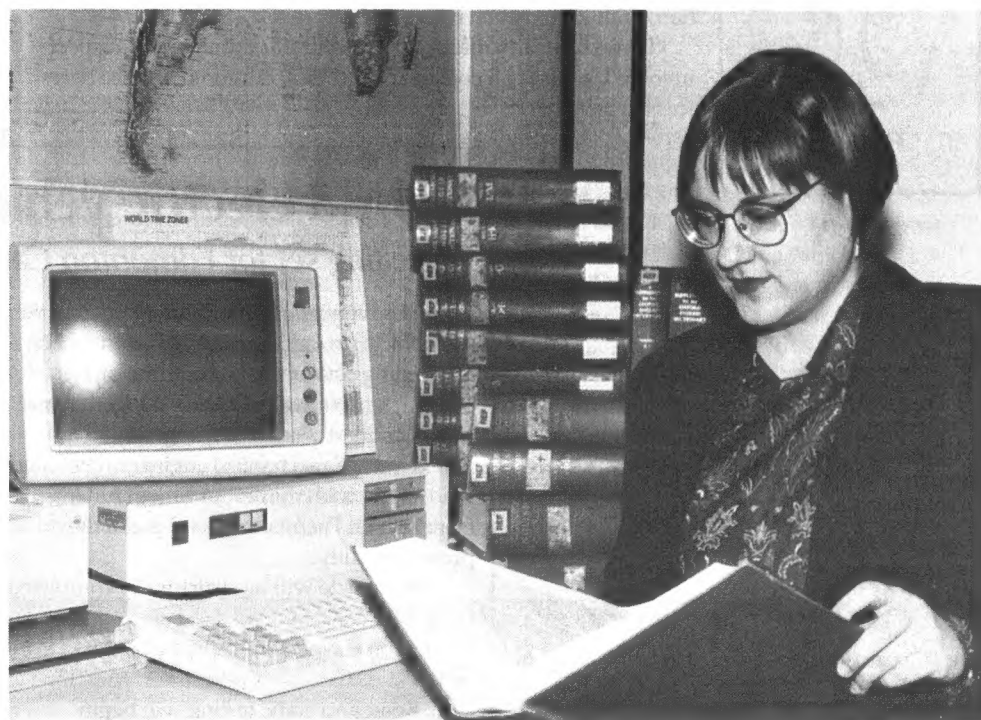
"Eventually, the *OED* will become a classroom resource," he said. "It will be used to help us teach the history of the English language better. In this format, it will be used in the classroom to teach general semantics, how meaning happens and under what conditions it takes place. It will help us do a better job analyzing diction, and conveying to students the structure of the lexicon."

"It will enable researchers in the Faculty to advance textual and stylistic analyses—partly because of the superior cross-referencing capabilities in the electronic format," Dr Merrett explained. "The Faculty of Arts, for its part, is very grateful to The Friends of the University of Alberta and the [donor] families for their contributions."

Benefactors who helped make the acquisition of the *OED*/II database possible include: The Friends of the University of Alberta; the Honourable Mr Justice Howard Irving, in honour of the memory of Muriel Ness Irving; the estate of the late Pauline Paege; the Office of the Dean of Arts; the Office of the Vice-President (Research); and the Office of the Vice-President (Student and Academic Services).

The University has spent about \$33,000 on the project so far. Private donors contributed \$18,000 of that money. About \$4,000 to \$5,000 is needed to cover the remaining costs.

Vice-President (Development and Community Affairs) John McConnell said the partnership between the University and private



Data Librarian Anna Bombak browses through the Oxford English Dictionary. Now users of the massive 20-volume second edition will also be able to use it in an electronic format. Students and staff will be able to sit down in front of a computer terminal connected to the campus network and do their work.

## Chemistry's Ole Hindsgaul awarded a Steacie Fellowship

The Natural Sciences and Engineering Research Council (NSERC) has awarded Ole Hindsgaul (Chemistry) a prestigious 1993 EWR Steacie Memorial Fellowship.

Dr Hindsgaul is recognized as one of the world's leading carbohydrate chemists.

The Steacie Fellowships are awarded to rising international stars in science and engineering. The award of salary plus benefits allows recipients the opportunity to focus on research fulltime, and to set aside teaching and administrative duties for up to two years.

Nominations are submitted from universities across the country.

*Folio* will carry a story on Dr Hindsgaul and his work in a coming issue.

donors has enhanced the opportunities for teaching, learning and research at the University. "Clearly, the importance of private fundraising has played a key role in this University's past and will increasingly play a key role in the University's future."

Director of Libraries Ernie Ingles said the *OED* on-line represents for many in the Library the beginning of a whole new way of delivering some kinds of information.

"Sometimes the 'new librarian' is criticized for becoming a little too 'techy' and too enamoured with technology," Ingles said. "I don't think technology will ever replace many of the weighty volumes [of the *OED*] for a great deal of scholarship, but there is more that we can do. This new technology allows us to expand to the margin and beyond the

kind of research that our scholars and students are going to be able to do.

"This [*OED* electronic version] represents for us one of our first sorties into the world of delivering electronic text," Ingles said.

The dictionary was prepared in electronic format by Oxford University Press. Oxford contracted with the University of Waterloo to develop a searching program which could handle the massive amount of text and provide completely unfettered entry to all the information. The result of the collaboration is a searching program called PAT and a screen formatting program called LECTOR.

The *OED*—the most complete record of the English language available—has definitions for more than 500,000 words and has etymologies for almost 250,000 entries.



## 'Dances With Words' gala to celebrate Writer-in-Residence Program

"Dances With Words," a gala benefit celebrating the Writer-in-Residence Program of the University's English Department, will be held 20 February.

The program will feature readings by current writer-in-residence Trevor Ferguson as well as by past writers-in-residence Kristjana Gunnars, Monica Hughes and Merna Summers. They will be joined by Scottish poet Tom Pow, the second Canada-Scotland exchange writer to be hosted by the English Department.

Now in its eighteenth year, the program is the longest continuously running one of its kind in Canada. Since 1975, it has been bringing to Edmonton major names in Canadian writing, including Matt Cohen, Marian Engel, Tom Wayman, Maria Campbell, Phyllis Webb, Elizabeth Smart, Samuel Selvon, David Adams Richards and Sandra Birdsell.

According to Greg Hollingshead (English), the program has two main objectives. "First, it provides all Alberta writers with access to a Canadian writer of national stat-

ure. Second, it gives the visiting writer nine months of reasonable financial security in an environment that offers both intellectual stimulation and sufficient time for writing."

The writers-in-residence hold office hours, give readings, visit classes and writing groups, judge literary competitions and generally do public work on behalf of the literary arts in Alberta.

Organizers are hopeful the gala will establish a solid base of financial support. Since its inception, funding for the program has come from a variety of sources—none of them certain from year to year, Dr Hollingshead points out. Next year's funding is also uncertain.

Tickets for "Dances With Words" are \$20 per person and are available from Audreys Books, Greenwood's Bookshoppe, U of A Bookstore, and Volume II. Doors at the Catalyst Centre, 10943 84 Avenue, open at 7 pm, and readings start at 7:30. There will be a cash bar, food, and dancing with the rock 'n' roll band Shroud of Memphis. Preferred dress: black, white, red, leopardskin print.

## GFC approves Faculty of Medicine proposal to establish Department of Oncology

*Cross Cancer Institute, Alberta Cancer Board fully supportive*

General Faculties Council gave its approval 18 January for the establishment of a Department of Oncology in the Faculty of Medicine.

According to Alberta Cancer Board President JM Turc, the proposal comes at a time of increasing recognition of oncology as an academic discipline in its own right. Increasing numbers of universities are taking similar steps.

"It will enhance the sense of common purpose in scholarly activity among the faculty working in the area," he said in supporting documentation. "It will clarify the expectations and accountability of these faculty members ... and it will help to recruit and retain excellent faculty."

Speaking in support of the proposal at GFC, Cross Cancer Institute Director Tony Fields said the proposal has the wholehearted support of the Institute's staff and of the Alberta Cancer Board. "It will be a department which has both clinical staff and basic science staff. This is similar to other departments in the Faculty." The majority of its support would come from an external agency, the Alberta Cancer Board, and the vast majority of the Institute's staff, including the clinical staff, are fully salaried already.

Referring to discussions with (then) Minister of Advanced Education John Gogo and (then) Health Minister Nancy Betkowski about the need for an additional \$250,000 per year to support the new department, GFC member Ginette Rodger asked what would happen if the funding was not forthcoming? Dean of

Medicine Doug Wilson responded that the Faculty has received feedback from the provincial government.

Dean Wilson said, "The proposal has been approved without the requirement for additional funding."

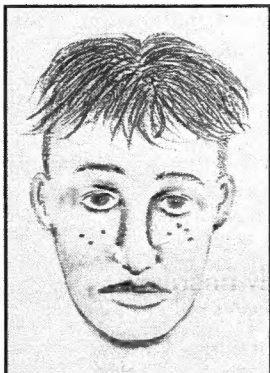
The University has had an affiliation agreement with the Alberta Cancer Board involving the Cross Cancer Institute for 15 years. Medical and scientific staff of the Cross Cancer Institute are obliged to hold University appointments which now involve nine departments in the Faculty of Medicine, two in Science and one in Education. These people belong to a division of oncology; Dr Fields serves as division director. The division reports to the Dean, offers several graduate courses and has no hard University funding.

Many of the new department's staff will continue to hold their primary University appointments, while others will continue their primary appointments in their current department and hold secondary appointments in the Department of Oncology.

The department is expected to operate clinical programs, conduct clinical and laboratory research in interdisciplinary groups, and provide undergraduate courses, graduate programs and specialty residency training programs in radiation oncology and medical oncology.

Twelve clinical divisions, four research programs and approximately 50 full-time academic staff will be included in the makeup of the department.

## Police request assistance in locating offender



On 14 December at 12:20 am, a female student was walking from Rutherford Library to "N" zone parking lot, east of HUB Mall, when she was accosted by a young male suspect. Police are requesting the University community's assistance in locating the offender. He is described as: Caucasian male, 23 to 25 years old, 6'-6"2", 175-180 pounds, slender build, light brown/blonde short hair, with six or seven moles on both cheeks.

If you have any information about this crime or the suspect involved, please call constable Fred Fiss, Edmonton Police Service, 435-3491.

## Hybrid electric vehicle project enters construction phase

*Unveiling set for Edmonton Car Show at Northlands*

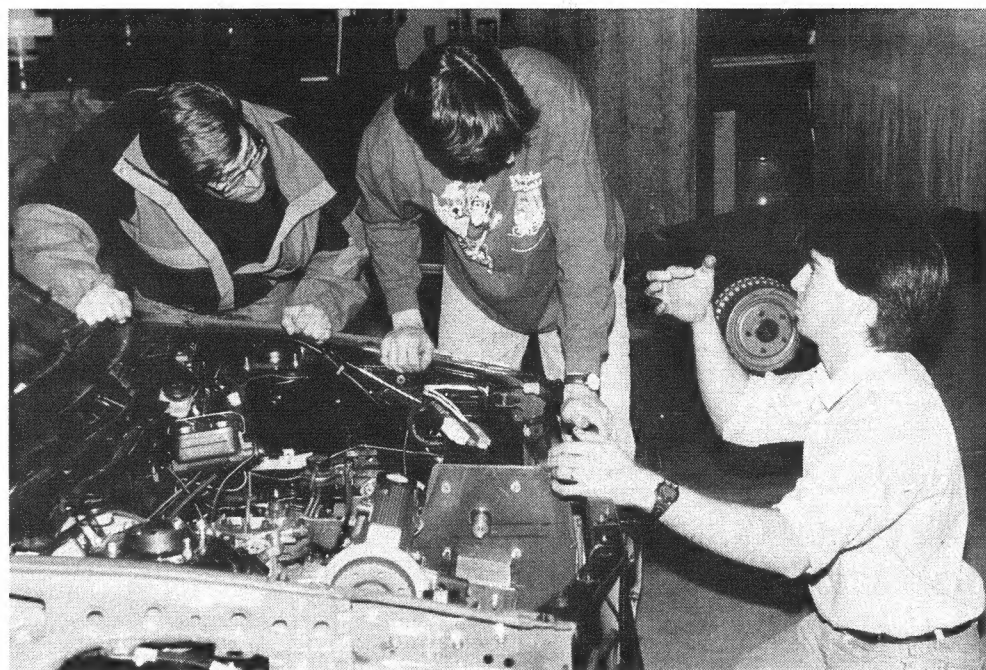
The University of Alberta's hybrid electric vehicle project is now in its construction and testing phase, the last of three phases.

"Right now we're putting it together and making sure it works," says Vince Duckworth, a mechanical engineering student who, along with numerous other students from several Faculties, helped make the project a reality.

The vehicle will be structurally completed by 23 February, and will be displayed at the Edmonton Car Show, held this year at Northlands Coliseum from the 23rd to the 27th. Road and static testing will begin 1 March; the students will leave on a cross-Canada tour 1 May and compete in early June with 29 other universities across the continent in the competition sponsored by the Ford Motor Company. Schools were asked to submit proposals. The successful schools were then given Ford Escorts and instructed to design and build hybrid electric vehicles. The U of A and Corcordia University are the only two Canadian entries in the competition.

Ford, and many other car companies, have realized that hybrid electric cars—cars that can operate on electric and combustion engine power—are not that difficult to build. However, Ford is extremely interested in the possible innovations that can be generated by enthusiastic university students.

The U of A entry uses a three-cylinder combustion engine and two electric motors that are powered by 143 nickel cadmium batteries manufactured by a French company. The batteries are cost-effective, proven technology and weigh half as much as lead-acid batteries, Duckworth explains.



Students from across the campus can often be seen working diligently on the HEV project on the main floor of the Mechanical Engineering Building.

"We've operated this project as if we were starting a car company," he says. In the beginning, organizational problems were ironed out, a reorganized management structure was established and three group leaders were appointed. The project, although based in the Faculty of Engineering, quickly grew to include students from across the campus.

Students in industrial design are designing and building the dashboard and a full-scale model of the engine bay, students in clothing and textiles are working on pit crew

clothing and upholstery and fine arts students are developing a display and promotional materials. The Northern Alberta Institute of Technology has provided plastics and automotive expertise. More than 100 people are involved, says Duckworth, and most of them are students.

The project has received in-kind and financial support in the neighbourhood of \$250,000, Duckworth says. Three major utilities companies have been particularly generous, contributing about \$90,000.

## FOLIO

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Advertisements cost 40 cents per word with no discount for subsequent insertions. There is a limit of 30 words and a minimum charge of \$2.00. Advertisements cannot be accepted over the telephone. All advertisements must be paid for in full at the time of their submission.

Display advertisements: 3 pm Thursday, eight days before desired publication date. Camera ready artwork is required to size, complete with halftones if necessary. Contact Public Affairs for sizes, rates and other particulars.

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# Mining Engineering's first PhD graduate well positioned for next move

The PhD. The top of the mountain, or, in a more realistic sense, the door-opener, the buoy on the résumé's flat sea of black and white. Each doctoral graduate's feeling of accomplishment is great, but it's hard to image anyone's being greater than Samuel Frimpong's. There are a number of reasons for that, beginning with the fact that he is the first PhD graduate in the 76-year history of the Faculty of Engineering's Mining Engineering program.

His thesis, which he defended last June, was titled "Evaluation of Mineral Ventures Using Modern Financial Methods." Among other things, his PhD research work could assist a mining organization that, having identified a mining prospect, is conducting a feasibility study before making a commitment to a major development. Through the use of modern asset pricing methods he could eliminate much of the uncertainty in mining that arises, because of the volatility of mineral prices and incomplete knowledge of the orebody under consideration.

"I found the program tough but interesting," Frimpong said, at the same time thanking his supervisors for helping him get a feel for just what he wanted to do as a researcher and acknowledging the freedom in which he participated with those supervisors in the selection of courses.

Frimpong is currently a sessional lecturer in the Department of Mining, Metallurgical and Petroleum Engineering. With professors Jerry Whiting and Simon Tortike, he's designed a new graduate course: Advanced Economic Evaluation of Mineral Resources. (Mineral resources refers to metals, nonmetals, for example, coal, and oil and gas.) In addition to teaching this graduate course, he's also working on operations research applications to mining problems, expanding on the work he carried out at the PhD level, and assisting John McDougall, The Ernest E and Gertrude Poole Chair in Management for Engineers, in his teaching of a winter section of Project Management and Entrepreneurship to final year Engineering and Business students.

Atop his list of options are: taking a position in a university as an assistant or associate professor, working in a research institution or with an engineering consulting firm, or working in project evaluation in the mining industry. An academic appointment is his first choice.

"There's no deadline on anything; I'm just playing it by ear," Frimpong told *Folio* last week.

Frimpong is from Ghana, a nation rich in mineral resources. Before setting out on his well-plotted academic path, he worked in underground gold mining production, in surface mining of manganese ore and in offshore production of crude oil. It was at the University of Science and Technology in Kumasi that he earned a BSc (Honors) in Mining Engineering. A year later, in 1986, the same institution awarded him a postgraduate diploma in Mining Engineering.

Frimpong came to the U of A by way of the University of Zambia where he took his master's in mine planning and production management. His MSc research focused on economic viability and risks associated with a heap leaching gold project in Zimbabwe (the heap leaching technology was new). In the middle of his master's program, he started thinking about going for his PhD, and was awarded a U of A/CIDA Fellowship (academic merit was the sole criterion) to come to the U of A, which he did in the winter of 1989. It was tough sledding ... not so much in the classroom as in getting to the classroom. Frimpong had arrived in the midst of Edmonton's coldest winter in 100 years. Oh, he had looked at a few brochures long before departing, but the weather information they contained was largely of the "sunny Alberta" variety. There was one advantage: he quickly got to know which building was which, because

## With professors Jerry Whiting and Simon Tortike, Frimpong has designed and is teaching a new graduate course: Advanced Economic Evaluation of Mineral Resources.

he stopped in all of them to get warm as he made his way from the Chemical/Mineral Engineering Building to the Library, the Business Building, the Van Vliet Centre (he likes jogging, badminton and aerobics) and other destinations.

David Laughton (Finance and Management Science) recalled that Frimpong came to the U of A with an interest in project evaluation, which in turn involves financial theory. Of the interdisciplinary collaboration that resulted, Dr Laughton said, "I was interested in the topics he and Jerry had in mind from the mining side and was happy to get involved. They had a nail and I had a hammer



Pictured with Samuel Frimpong, centre, are Jerry Whiting, Professor of Mining Engineering, left, and David Laughton, Assistant Professor of Finance. They and John Whittaker, Professor of Mechanical Engineering, co-supervised Dr Frimpong's PhD research work.

that I'd been using for a while. I taught Samuel how to use it and Jerry showed him which nails to use."

Dr Laughton taught Frimpong Advanced Corporate Finance and Risk Management and made arrangements for Frimpong to do the majority of the computational work in his (Dr Laughton's) office.

The PhD program in Mining Engineering received funding from NSERC, Imperial Oil, SSHRC, Sask Oil and Interprovincial Pipe Line Inc. Also contributing financially were the Faculties of Business and Engineering and the University's Central Research Fund.

In the history of the University's Mining Engineering program almost 600 students have been awarded the BSc, and there are three dozen MSc graduates. However, the research emphasis in Alberta's program only took shape in the last 15 years or so. For a lengthy period of time there was only one full-fledged professor of Mining Engineering—Tom Patching—and the wherewithal to set up a PhD program simply didn't exist.

As the number of MSc students rose, the department started looking for PhD students.

Now, three more students—one from Czechoslovakia, and two from China—are nearing the completion of their PhD programs. (People from overseas tend to feel more strongly than Canadians and Americans that education in itself is a very valuable commodity, and that being a professor at a university is a great honour, Dr Whiting, Past Chair of the department, and members of Frimpong's supervisory group have observed.)

## Mining's image vastly improved

In industry there was for many years a shortage of Mining Engineering graduates, because of a lack of knowledge of opportunities in this field. Mining suffered from a poor image, and bore the label of a "smokestack industry", Dr Whiting said. The facts are much different. Industry makes use of the latest technology. However, this means the University's graduate program and industry are essentially courting the same students. Frimpong and the U of A are exceedingly happy he made the choice he did.

## PRESIDENTIAL REVIEW COMMITTEE

President Paul Davenport has formally advised the Board of Governors that he is prepared to be considered for a second term of office as President. The Board, in accordance with GFC and Board-approved procedures set out in Section 102.1(C) of the GFC Policy Manual, has decided to proceed with the structuring of a Review Committee. By GFC and Board policy, the composition of a review committee is the same as that of a Presidential Search Committee. The Review Committee hopes to begin its work in late February.

The composition of the Review Committee for President includes three members of the full-time and continuing part-time faculty who do not hold administrative positions and who are not on leave. Nominations for these positions are now being sought.

Written nominations supported by the signatures of five members of the full-time and

continuing part-time academic staff (not including the nominee) may be submitted to the Director of the University Secretariat, Ellen Schoeck, 2-5 University Hall. Nominations must be received by Friday, 5 February 1993, 4:30 pm. Nominees must agree to stand for election to the Review Committee. A brief *vitae* of the candidate should accompany the letter of nomination. GFC regulations require that nominees may not be holders of administrative positions, such as Dean or Department Chair, since administrators are already represented on the Review Committee. The full composition of the Review Committee for the President, together with nomination and election procedures, are contained in Section 102 of the GFC Policy Manual. Anyone having questions about eligibility to serve or to nominate should telephone Ellen Schoeck at 492-5430.

## CURRENTS



### Women and Narrative conference: call for proposals

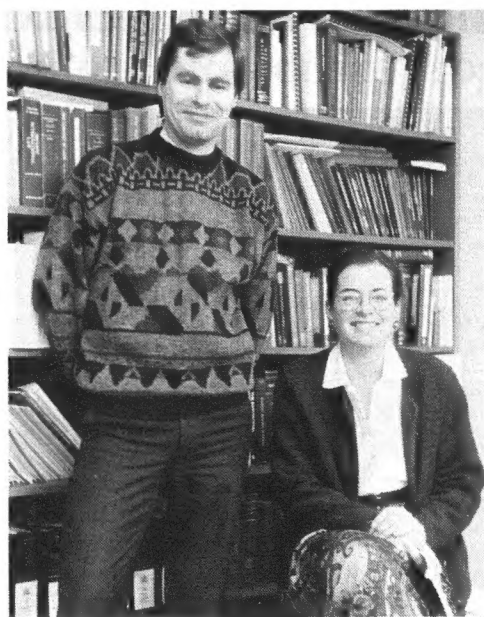
The Anthropology Department is sponsoring an interdisciplinary conference on Women and Narrative in the fall of 1993. Some of the topic areas under consideration are life history/autobiography; orality and literacy; ethnohistory; and women in indigenous/Third World/other cultural narrative, but any proposal that links women and narrative would be of interest. Deadline for abstracts/suggestions for speakers is 15 February. Send all correspondence to: Carol Murray, Visiting Speakers Committee, Department of Anthropology, 13-15 Tory Building.

### Communicating science effectively

On 10 February, Jerome Martin of the Faculty of Extension will lead a workshop on communicating scientific information. The workshop is intended to help professionals in science and applied science present material to the public, the media, funding organizations, and colleagues. Presentation techniques, organizational skills, and the use of visual aids will be covered in the workshop.

The workshop fee is \$65. For further details, call the Faculty of Extension, 492-3029.





Law professor Gerald Robertson, a specialist in health-law issues, will join forces with Université de Montréal law professor Bartha Knoppers, a specialist on human genetics and reproductive technologies, on a three-year, SSHRC-funded project.



## ETHICS AND THE PRACTICE OF GENETICS

*Université de Montréal professor, Faculty of Law's Gerald Robertson to conduct national study*

More than a century ago, Austrian monk Gregor Mendel meticulously began to explore the biological bases of inheritance. During the early part of this century, there was an explosion of genetic research. Researchers in the 1940s discovered the composition of hereditary material, deoxyribonucleic acid (DNA). James Watson and Francis Crick were awarded the Nobel Prize for their work on determining how hereditary material can be passed on from one cell to another.

Today, molecular biologists are exploring genetic worlds Mendel could never have imagined possible. Genetic engineering—the synthesis, alteration or repair of genetic material by synthetic means—is a reality. Genetic counsellors, armed with an ever-expanding knowledge of human genetics, are dispensing advice to Canadians concerned about possible genetic disorders.

But in what kind of social/ethical environment is this expanding “practice of genetics” being conducted? Are the professional ethics and norms governing doctors, geneticists, counsellors, patients and molecular biologists satisfactory? Those are two of many questions Law Professors Bartha Knoppers (Université de Montréal) and Gerald Robertson (University of Alberta) hope to answer with their national study of professional ethics in the practice of human genetics.

With funding for three years from the Social Sciences and Humanities Research Council, Professors Knoppers (principal investigator) and Robertson (co-investigator), want to start by identifying and analyzing existing sources of professional and social norms underlying some of the quality of life choices being made in the practice of human genetics.

They then want to evaluate these practices and study the perceptions of these norms by users. Are patients well informed, for example? And do they understand the science? Thirdly, they want to develop a professional ethics consensus statement to guide patients, professionals and policy-makers. The statement will be used to help patients and professionals understand the nature of their relationships, decision-making and corollary responsibilities, explains Professor Knoppers.

The professors are conducting the research project against a backdrop of several trends. First, the “judicialization of medicine” is placing the medical profession and medical innovation under increasing public and legal scrutiny, Professor Knoppers says. Often this surveillance of the medical profession is happening as a result of lawsuits. Professor Knoppers has identified another trend: the “geneticization of society. Genetics will be seen as the cause of everything and the cure for everything.”

The third trend is the professionalization of human genetics, she says, noting the establishment of the Canadian College of Medical Geneticists and other genetics-related organizations.

Professor Knoppers, who has written extensively on human genetics and reproductive technologies, will spend the next term at the University of Alberta. As well as conducting research on the interdisciplinary project, she'll be teaching a course titled Genetics, Ethics and Law. Professor Robertson, who specializes in

medical-legal issues, will be conducting research and assisting with the coordination of the Faculty of Law's Health Law Institute's involvement. Faculty and students will be involved in doing some research and writing for the project, he says. Meanwhile, a sociologist is conducting a nation-wide survey of geneticists and patients.

The practice of genetics will touch everyone. Genetic information and therapy has the potential of affecting the individual and the collectivity, Professor Knoppers, the author of *Human Dignity and Genetic Heritage*, a 1991 study paper written for the Law Reform Commission of Canada, points out.

Molecular biologists are not doing value-neutral science. “They're not anonymous, hands-off players anymore.” Furthermore, practicing geneticists, genetic counsellors, patients and the state will all play increasingly important roles. Funding priorities, for example, will become increasingly important public policy questions, particularly in Canada where there is a national health care system. So all the players have an interest in having a legal and ethical framework in which they can make informed, responsible decisions.

**The practice of genetics will touch everyone. Genetic information and therapy has the potential of affecting the individual and the collectivity.**

*Professor Bartha Knoppers*

Professors Robertson and Knoppers aren't suggesting the players touched by genetic science are working in an ethical vacuum. Some are working by extrapolating from existing codes of medical ethics, Professor Knoppers explains. “One of our purposes is to find out whether the current codes and practices are sufficiently reassuring in terms of promoting open and honest exchange in the physician-patient relationships. And we want to see whether there's really nondirective counselling going on.”

Linda MacLaren, a genetic counsellor with the Edmonton Genetics Clinic based at the University of Alberta Hospitals, says it's vital that nondirective counselling take place. “We give people information and outline their options; we're not in the business of telling people what they should or should not do.”

Patrick Ferreira, Director, Division of Medical Genetics, agrees. “First, we determine what the problem is, find out if the family understands the problem, provide the family with information, outline their options and then provide medical help depending on the individual or family's informed choice. We hope that in doing that we may reduce the incidence or severity of genetic disease in society, but this is not a primary goal: our first responsibility is to the individual or family seeking help.”

He points out, however, that some physicians—accustomed to being more directive with patients—are uncomfortable with the nondirective approach. Dr Ferreira, who teaches medical students the medical genetics

course which includes a unit on genetic ethics, says people working in the genetics field feel that non-directive counselling is the only tenable approach.

But while molecular biologists are uncovering evermore genetic information, and patients, counsellors and geneticists are coming to grips with many of these scientific advances, genetic education lags behind. The Science Council of Canada, in its 1991 report *Genetics in Canadian Health Care*, pointed out the urgent need for public education on genetics. At the university level, the Council recommended that general biology and molecular biology courses should provide information on the growing knowledge about, and technologies associated with, the mapping of the genome and the links between specific genes and diseases. Professor Knoppers says an ethical framework can be put in place for patients and people working in the field, but if the public does not understand the framework it will not be accepted or considered legitimate.

Even today, when someone mentions the word genetics, people still think about Hitler's repugnant motives, the eugenics movement, Frankenstein, and Big Brother. In their 1988 book *Genethics*, geneticists David Suzuki and Peter Knudtson say history confirms that knowledge about heredity has always been vulnerable to exploitation by special-interest groups in society.

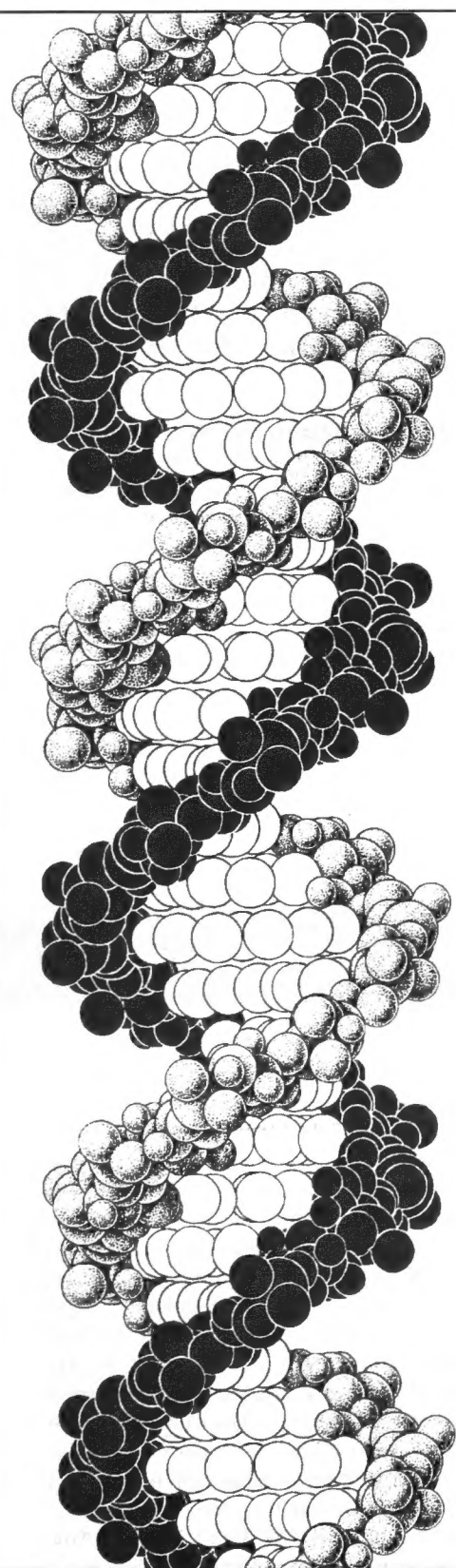
But if genetic information is properly framed and understood, says Professor Knoppers, the chances that that information will be used to discriminate against people will be reduced. “But to ensure that it doesn't we have to do a lot more public education.”

At this point, however, our knowledge of genetics-related diseases is far outstripping our ability to treat them. People will be making proactive choices in that environment. “To make those kinds of quality of life choices, you need unbiased information,” she says, pointing out that the disabled have for many years been stigmatized. There is a danger that genetic information could become a source of social stigmatization. For example, what kinds of social pressures would come to bear on known carriers of genetic diseases?

The kind of exploration of the issues Professors Knoppers and Robertson are engaged in is useful, Dr Ferreira says. Abuses can occur, particularly given that new technological advances are occurring so rapidly. “I would hate to see any abuses occur that would have the effect of curtailing services currently available, or limiting people's choices,” Dr Ferreira says.

There's a hopeful side, however, says Professor Knoppers. “Genetics will show that everyone is at risk, and if everyone's at risk then perhaps the disabled, visible or not, [many people are carriers whether they know it or not] will be considered the norm,” she concludes. For example, (the ratio of) cystic fibrosis carriers in North America is one in twenty-five, in northern Europe one in fifteen. “So in terms of carrier status, it would seem to be a very ‘normal’ disease.”

“We all share the common problems related to human genetics; DNA is already universally shared.”



Unlocking the secrets of the DNA double helix has created ethical questions for molecular biologists, counsellors, geneticists, doctors, parents and legislators.



# Engineering students establishing camps to attract younger students

Concept originally piloted at Queen's University

Last January, Engineering Students' Society President Chantelle Carley attended the Canadian Conference of Engineering Students. There Queen's University engineering students explained how, with industrial and government support, they established summer science camps for younger students.

Carley liked what she heard, and so when she returned she got the ball rolling. She, along with her ESS colleagues, sought advice from other schools on fundraising and programming, spoke with the Dean and approached government and industry for funding.

This summer the ESS, with some industrial and government funding, will hold "Discover E Summer Science Camps" at the U of A.

The camps, open to children entering Grades 5 to 9, will operate during July and August. During the week-long camps, students will learn more about science and engineering by doing experiments, touring the campus and working on science projects. Meantime, during May and June, ESS students will be presenting workshops in elementary and junior high schools throughout the region. The workshops will be used to promote science and engineering to larger numbers of students who will not all be accommodated by the camps.

"Children get turned off of science at a young age, and teachers aren't very enthusiastic about teaching the sciences," says Carley, adding that when these same students reach high school they don't take the required courses in order to pursue the sciences in the postsecondary environment.

The programs exist at 11 other universities. This will be the first in Alberta. For now, the enrollment will be handled on a first-come first-served basis, Carley explains, noting that the programs at eastern universities are typically oversubscribed and applicants there have to write essays, explaining why they'd like to participate.

The ESS plans to do a mass mailing through the school boards and at the workshops in May and June students will explain what the campus are all about.

Corporations have been enthusiastic. Imperial Oil, Dow Chemical, AOSTRA, Alberta Power and Northwestern Utilities have brought the total funding up to \$7,600. The ESS is waiting to hear about a \$15,000 grant application it submitted to Science Culture Canada. If that one is unsuccessful, the salaries for the four Discover E Summer Science Camp and workshop instructors will have to be reduced, Carley says.

Carley is also aware of the importance of role models. Two of the four camp instructors will be female.

The ESS, like its counterpart at Queen's, wants to establish a database in order to keep track of students who have taken the camps. They want to establish whether or not the camps are having an impact. The Queen's program, Science Quest, has been around for five years. A survey of students who participated in their camps will be released sometime in March and should provide useful data, Carley says.

Ultimately, the objective is to encourage more young people to enroll in courses that will prepare them for careers in science and technology. The ESS, wanting to dispel some myths as well, will design the camps to demonstrate that science and engineering are fun.

The unofficial motto?

I hear, and I forget  
I see, and I remember  
I do, and I understand

## Books donation honours first Head of Psychology

"He set out to be a boulder-builder, not a pebble-picker," Lee Royce says of her late husband, Joseph R Royce, the person credited with the fully rounded development of the Department of Psychology. Mrs Royce was on campus recently to present a number of Dr Royce's books to the department. The Chair, Gene Lechelt, accepted them gratefully.

Dr Royce took his PhD at the University of Chicago and taught at Drake University and the University of Redlands, California, before coming to the U of A in 1960 and being appointed the first Head of the Department of Psychology. In 1967, he established the Centre for Advanced Study in Theoretical Psychology.

"Due to his reputation, he was able to bring people here who likely wouldn't have come otherwise," said Dr Lechelt. He recalled that when he was a graduate student, the authors of some of the major texts that he was

studying would visit the department and interact with students.

"He made the commitment to research and experimental psychology. That momentum still resounds through these walls," Dr Lechelt said.

In 1987, *Alberta Psychology* stated: "It is truly the case that Joseph R Royce put psychology at the University of Alberta on the map as an experimental scientific discipline with a strong commitment for the development of interdisciplinary theory primarily through his reputation and the high international regard for his work."

Dr Lechelt said Dr Royce was able to be a specialist in five or six fields simultaneously and so it is that the newly donated books pertain not only to experimental psychology but to philosophy, biology, mathematics and physiology.

## Canada's foremost champion of free speech critical of courts

Alan Borovoy visits Law Faculty to give two talks

In the Charter of Rights era, the courts have shown in their judgments too low a tolerance for disruption and too high a tolerance for vagueness, says Canada's foremost champion of free speech.

Alan Borovoy, counsel general of the Canadian Civil Liberties Association, said last Friday that it is vitally important that lawyers, law students and professors try to develop different and more realistic theories of what freedom of expression has to involve.

These theories have to be relevant to real people who are waging the real struggles of the real world, he said. "But I don't think we should stop there. We should remember that these fights are not confined to and should not be confined to the courtroom."

"There's a tendency of people in the era of the Charter to put all their eggs in the judicial basket," he said. "By all means use the courts ... but remember the political process," he said, reminding students and professors that legislative actions have in the past redressed judicial dubiousness. For example, there was a time when courts in Canada were issuing far more injunctions against labour picketing than they do now.

"We began to cure that at the legislative level and began to restrict the powers of the courts to issues injunctions," he said.

Borovoy spent much of his talk his outlining several examples of court decisions which



Alan Borovoy: a vocal critic of certain provisions of the Criminal Code which have been used to stifle freedom of expression.

have in the past decade set unnecessary limits on legitimate freedom of expression. "I urge not to be consoled by the fact that there were no lasting convictions or permanent seizures of property in these cases."

"A viable freedom of expression cannot work if, when you're engaging in legitimate activity, you have to look over your shoulder, fearful that you're going to be charged. If you're subject to vague terminology that purports to muzzle your speech, the risk is that you're going to wind up muzzling yourself in order to avoid the risk of being charged."

## Canada and globalization

The world is undergoing profound economic, technological, conceptual and ideological changes that affect the identities and sovereignty of all countries. We must rethink what it means to be Canadian under these changed conditions, urges Gordon Laxer (Sociology).

The Canadian Studies Program and the Centre for Constitutional Studies at the University of Alberta have organized a conference (see page 8) featuring speakers who have been thinking and writing about these issues. Each session has been set up as an interchange between people with different perspectives, Professor Laxer explains. Many thinkers, especially in economics and business, see globalization as benign, a "win-win" situation, where all benefit from increased trade and investment. Others see the transnational corporations as the great beneficiaries of global mobility rights while democratic political communities lose sovereignty and influence over their affairs in this version of corporate internationalism.

Three prominent academics will be coming from out of town to participate in the confer-

ence. Duncan Cameron, editor of the *Canadian Forum* and professor of political science at the University of Ottawa, will talk about who and what is driving "globalization". Well-known Quebec author Christian Dufour will talk in a public forum about the construction of Quebec's identity in the aftermath of the referendum. Kenneth McRoberts, author of *English Canada and Quebec: Avoiding the Issue*, and professor of political science at York University, will speak in the same session about English Canada's identity. University of Alberta historian Olive Dickason, author of *Canada's First Nations*, will explore native identities.

Does globalization mean a homogenized world culture based on the American entertainment industry or will distinctive local and national cultures survive and thrive? This is the subject of a session featuring Jane Ash Poitras, a painter and native activist. In last fall's constitutional referendum, a central issue was whether equality means same treatment. Susan Jackel of the Canadian Studies Program will discuss this issue.



Lee Royce, left, and Gene Lechelt look over one of several books that Mrs Royce recently donated to the Department of Psychology. They're seated in a reading retreat that will soon be named the Royce Collections Room.



## ACCOUNTING AND MANAGEMENT INFORMATION SYSTEMS

5 February, 2 pm

Gordon Richardson, University of Waterloo, "Capital Effects of American-Canadian GAAP Differences." B-05 Business Building.

## ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

2 February, 4 pm

Stefano Stifani, postdoctoral fellow, Molecular and Developmental Neurobiology Program, Boyer Center of Molecular Medicine, Yale University, "Characterization of Human Homologs of Drosophila Neurogenic Genes." Presented by Anatomy and Cell Biology. 5-10 Medical Sciences Building.

11 February, 4 pm

Renping Zhou, science associate, Molecular Oncology Section, Molecular Mechanisms of Carcinogenesis Laboratory, NCI-Frederick Cancer Research and Development Center, Frederick, Maryland, "The Function of the Mos Proto-Oncogene and Cell Cycle Control." Presented by Anatomy and Cell Biology. 5-10 Medical Sciences Building.

## ANTHROPOLOGY

29 January, 3 pm

Eric Higgs, "Constructing Nature: The Social Problem of Ecological Restoration." 14-6 Tory Building.

## APPLIED MATHEMATICS INSTITUTE

29 January, 3 pm

Quyen Huynh, Department of the Navy, Newport, RI, "Adaptive Wavelet Analysis of Transient Signals." 335 CAB.

## ART AND DESIGN

8 February, 3 pm

Robert John Poor, Departments of Art History and East Asian Studies, University of Minnesota, "In the Mind's Eye: Ancient Chinese Bronzes." Cosponsor: East Asian Languages and Literatures and Anthropology. 2-20 Fine Arts Building.

8 February, 5:15 pm

John McLean, visiting artist, "The General and the Particular." 2-20 Fine Arts Building.

9 February, 3:45 pm

Robert John Poor, "Zen and Japanese Painting." Cosponsor: East Asian Languages and Literatures and Anthropology. 2-20 Fine Arts Building.

## BOTANY

11 February, 3:30 pm

Randy Currah, "Zen and the Art of Mycorrhizal Research in Japan." M-149 Biological Sciences Centre.

## CAMPUS MINISTRY

2 February, 7:30 pm

Fred Clay, CSB, "Understanding Catholicism—Eucharist." St Joseph's College.

## CANADIAN MEDITERRANEAN INSTITUTE

11 February, 7:30 pm

James Schovánek, "The Rock Tombs of Lycia" (with illustrations). Provincial Museum of Alberta, 12840 102 Avenue.

## CANADIAN STUDIES AND CENTRE FOR CONSTITUTIONAL STUDIES

A two-day conference on "Canadian Identities in an Era of Globalization." Registration: \$10/students—no charge. 492-5086. Lectures will be in the Stollery Centre, 5th Floor, Business Building (unless otherwise noted).

4 February, 1 pm

Duncan Cameron, Political Science, University of Ottawa and Michael Percy, "Globalization: Winners and Losers."

4 February, 3:30 pm

Roger Smith and Gordon Laxer, "Citizenship and Democracy in a Global Economy."

4 February, 7:30 pm

Olive Dickason; Christian Dufour, Political Science, Université Laval; and Kenneth McRoberts, director, Robarts Centre for Canadian Studies, York University, "Constructing Canadian Identities." 2-115 Education North.

5 February, 10 am

Colin Hoskins, Stuart McFadyen, and Jane Ash Poitras, painter, native and public activist, "The Global Village and Cultural Survival."

5 February, 1:15 pm

Susan Jackel, "Equality and the Politics of Difference."

## CUSO

9 February, 7:30 pm

Mark Anielski, Corporate Services and Strategic Planning, Alberta Forestry, Lands and Wildlife, "Resource Accounting: Reconciling the Environment and the Economy." Concordia College, Highlands Campus, 7128 Ada Boulevard.

## CHEMICAL ENGINEERING

4 February, 3:30 pm

X Fan, Experimental Study of Mass Transfer Due to Parallel Air Jets by Holographic Interferometry." 342 Chemical-Mineral Engineering Building.

11 February, 3:30 pm

D Banerjee, "Bioremediation of Oil Contaminated Soil." 342 Chemical-Mineral Engineering Building.

## COMPARATIVE LITERATURE AND FILM STUDIES

9 February, 3:30 pm

Marc Furstenau, "The Cinema of Guy Debord." Senate Chamber, Arts Building.

## EDUCATION

11 February, 7 pm

"Schools in Transition" —a followup forum which will examine implications of inclusive education practices and issues for Alberta schools. The first half will have each panel member presenting for 10 minutes. Following a break, speakers will have the opportunity to comment on/ask questions of other presenters, and questions will be invited from the audience.

Moderator: Carolyn Yewchuk. Lorraine Wilgosh, "Colloquium Overview." Harvey Finnestad, director, Education Response Centre, "Alberta Education." Vivian Skakun, parent advocate for inclusive education, "Parent Perspective." Klaus Puhmann, superintendent, Yellowhead School Division #12, "Implementation." Clavic Fraser, Coordinator of Member Services, "Alberta Teachers' Association." Jim Creechan, past president ELDA, critic of inclusive education, "Parent Perspective." Linda McDonald, "Teacher Education." 2-115 Education North.

## ENGLISH

The Responsible Critic: A Public Forum on the Political, Cultural, Institutional, and Social Scope of Critical Thought Now

29 January, 1 pm

Glenn Burger, "The Responsibilities of the Gay Critic." L-3 Humanities Centre.

29 January, 2 pm

Shirley Neuman, "The Feminist Critic and Public Institutions." L-3 Humanities Centre.

29 January, 3 pm

Elaine McCoy, MLA, "Politics, the Critic, and the Politician." L-3 Humanities Centre.

29 January, 4 pm

Len Findlay, director, Humanities Research Unit, University of Saskatchewan, "The Critic and the Community." L-3 Humanities Centre.

1 February, 4 pm

Ian MacLaren, Daphne Read and Chris Bullock, "A Panel on What Makes our Work Tick." L-3 Humanities Centre.

8 February, 4 pm

Tom Pow, Scottish exchange fellow, "Scottish Literature: A Canadian Perspective." L-3 Humanities Centre.

## ENTOMOLOGY

4 February, 4 pm

Garry Scrimgeour, "Feeding and Avoiding Predators: Short-term Decisions and Long-term Consequences." TB-W1 Tory Breezeway.

11 February, 4 pm

Susanna Acheampong, "Startle Response Syndrome in the Colorado Potato Beetle, *Leptinotarsa decemlineata* (Coleoptera: Chrysomelidae)." TB-W1 Tory Breezeway.

## FOOD SCIENCE

1 February, 4 pm

Yiwei Wang, "Kinetics of Solvent Oil Extraction from Oil Seeds." 1-13 Agriculture-Forestry Centre.

8 February, 4 pm

Ed Phillipchuk, Marketing Division, Alberta Agriculture, "Marketing Trends and Opportunities for Alberta's Food Industry in Japan." 1-13 Agriculture-Forestry Centre.

## FOREST SCIENCE

3 February, noon

H Epp, director, NWT Centre for Remote Sensing, Department of Renewable Resources, Government of the Northwest Territories, "Satellite Remote Sensing and Geographic Information Systems in the Northwest Territories." 821 General Services Building.

## GERMANIC LANGUAGES

29 January, 3 pm

Christoph Lorey, "Glaube und Zweifel, Lüge und Wahrheit, Genialität und Einfalt: Ein Vergleich von Georg Büchner's *Dantons Tod* and Bertolt Brecht's *Leben des Galilei*." 326 Arts Building.

## HUMAN ECOLOGY: ISSUES IN THE NORTH

2 February, 4 pm

William Pruitt, Jr, Zoology, University of Manitoba, "Possible Greenhouse-Induced Habitat and Faunal Changes in the Taiga of Central Canada." 231A Law Centre.

9 February, 4 pm

Ken Ward, Feather of Hope, "AIDS: (Breaking Barriers)." 231A Law Centre.

## INTERDISCIPLINARY ROUND-TABLE

10 February, 4 pm

Interdisciplinary round-table discussion on "Present Images of the Eighteenth Century." Senate Chamber, Arts Building.

## LAW

29 January, noon

Brian Slattery, "Aboriginal Rights and the Fiduciary Duty of the Canadian State." Faculty Lounge, 4th Floor, Law Centre.

1 February, noon

Carolyn Merchant, University of California at Berkeley, "Re-Investing Nature." Faculty Lounge, 4th Floor, Law Centre.

1 February, 3 pm

Carolyn Merchant, "Re-Investing Nature." TB-L1 Tory Lecture Theatre.

## LIMNOLOGY AND FISHERIES DISCUSSION GROUP

4 February, 12:30 pm

Jeff Curtis, "What's Up? Dissolved Organic Carbon." M-149 Biological Sciences Centre.

11 February, 12:30 pm

Richard Robarts, NHRI, Saskatoon, "Microbial Ecology of Prairie Saline Lakes." M-149 Biological Sciences Centre.

## MEDICAL MICROBIOLOGY AND INFECTIOUS DISEASES

29 January, noon

Pieter Roos, "Regulation of the Cholera Toxin by Interaction of Two Membrane Proteins ToxR and ToxS: Signal Transduction and Transcriptional Activation." 2J4.02 Mackenzie Health Sciences Centre.

## PERINATAL RESEARCH CENTRE

2 February, noon

John M Bissonnette, MD, Oregon Health Sciences University, "Relationship of Volume Regulation in Trophoblast Cells to Water Acquisition by the Fetus." Cosponsor: Alberta Heritage Foundation for Medical Research. 2J4.02 Mackenzie Health Sciences Centre.

## PHILOSOPHY

29 January, 3 pm

JJ MacIntosh, Philosophy, University of Calgary, "The Argument from the Necessity of Similar Causes." 4-29 Humanities Centre.

## PLANT SCIENCE

2 February, 12:30 pm

Bruce Moltzan, "Microbial Competition." 1-06 Agriculture-Forestry Centre.

9 February, 12:30 pm

Mitch De Beus, "Polyamines." 1-06 Agriculture-Forestry Centre.

11 February, 12:30 pm

Cory Nykiforuk, "Seed Storage Protein." 1-06 Agriculture-Forestry Centre.

## ST JOSEPH'S COLLEGE

29 January, 2 pm

Hugh McGeary, director, Family Services, Catholic Social Services, and Gwen MacKinnon, "Changing Perceptions of Family Violence." Faculty Lounge, St Joseph's College.

## SLAVIC AND EAST EUROPEAN STUDIES

3 February, 3 pm

Caryl Emerson, Princeton University, "Russian Literary Criticism and Mikhail Bakhtin—The Shape of Literary Criticism in the Post-Communist Period." 4-29 Humanities Centre.

5 February, 3 pm

Caryl Emerson, "Russian Literary Criticism and Mikhail Bakhtin—The Russians Reclaim Bakhtin." 4-29 Humanities Centre.



8 February, 3 pm  
Natalia Pylypiuk, "In Her Own Image: Creating a Predecessor" (Kostenko's Marusia Churai). 436 Arts Building.

10 February, 3 pm  
Caryl Emerson, "Russian Literary Criticism and Mikhail Bakhtin—Bakhtin and Women: A Non-Topic with Immense Implications." 4-29 Humanities Centre.

#### SOIL SCIENCE

4 February, 12:30 pm  
David Chanasyk, "Water Management: Alternate Approaches to a Common Problem." 2-36 Earth Sciences Building.

#### STUDENTS FOR NATURAL LAW

10 February, 4 pm  
Pat Simpson, "Introduction to Transcendental Meditation." 1-83 Tory Building.

#### WOMEN'S STUDIES

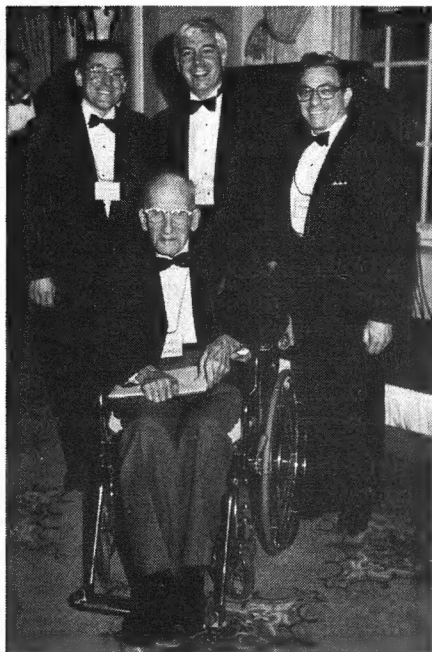
2 February, 3:30 pm  
Alice Mansell, Department of Visual Arts, Western University, "Identity Politics, Framing Feminist Art Practices in Canada." Senate Chamber, Arts Building.

11 February, 3:30 pm  
Leslie Oakes, "An Accounting of Women's Lives: Gender Studies of Financial Calculations and Measurement." Senate Chamber, Arts Building.

#### ZOOLOGY

29 January, 3:30 pm  
Jens Roland, "Parasitoid Search Behavior and Host Population Dynamics: Successful Biological Control of Winter Moth in Canada." M-149 Biological Sciences Centre.

*This symbol denotes environmentally related seminars/events. If you wish to have an environmentally related event listed in this way, please contact: The Environmental Research and Studies Centre, 492-6659.*



The Faculty of Dentistry's oldest living alumnus (Class of 1930), Sperry Fraser, seated, was one of 45 distinguished educators honoured at the Faculty's 75th Anniversary Banquet held at the MacDonald Hotel last month. Dr Fraser, aged 92 years, was Chair of the Department of Prosthodontics from 1932 to 1962. Pictured with Dr Fraser are, from the left, Dean Norman Wood, President Paul Davenport and Geoffrey Sperber, Chair of the 75th Anniversary Committee.

## EVENTS

#### EXHIBITIONS

##### CLOTHING AND TEXTILES COLLECTION

Until 18 June  
"Changing Suit: The Evolution of Men's Business Wear 1955-85"—an exhibition of men's wear from the collection. Hours: Monday to Friday, 8:30 am to 5 pm. Basement, Home Economics Building.

##### FAB GALLERY

Until 7 February  
"Multidimensional Perspectives"—an exhibition of work by first year graduate students enrolled in the MVA program.

Until 7 February  
"Giving Voice to the Silent World"—an exhibition of artists' books in the final visual presentation in partial fulfillment of the requirements of MVA in Printmaking. Gallery hours: Tuesday to Friday, 10 am to 5 pm; Sunday, 2 to 5 pm; Monday and Saturday, closed. 1-1 Fine Arts Building.

##### MCMULLEN GALLERY

Until 3 March  
"The Dolls of Japan—Shapes of Prayer, Embodiments of Love." Gallery hours: Monday to Friday, 10 am to 4 pm; Saturday and Sunday, 1 to 4 pm (subject to availability of volunteers). Information: 492-8428, 492-4211. Walter C Mackenzie Health Sciences Centre.

#### MUSIC

##### DEPARTMENT OF MUSIC

6 February, 8 pm  
Faculty Recital—Helmut Brauss, pianist, will perform with the Edmonton Symphony Orchestra. Tickets: ESO Box Office, 428-1108. Jubilee Auditorium.

7 February, 8 pm  
Kilburn Encounters IV. Convocation Hall.

9 February, 8 pm  
Faculty Recital—Fordyce Pier, trumpeter. Convocation Hall.

10 February, 12:10 pm  
Noon Hour Organ Recital. Convocation Hall.

10 February, 8 pm  
PM Master of Music Recital—Gerry Paulson, conductor with the Lab Choir. Convocation Hall.

#### SPORTS

##### BASKETBALL

29 and 30 January, 6:30 pm  
Pandas vs Lethbridge

29 and 30 January, 8:15 pm  
Bears vs Lethbridge

#### HOCKEY

5 and 6 February, 7:30 pm  
Bears vs University of Regina

#### VOLLEYBALL

5 and 6 February, 6:15 pm  
Pandas vs University of British Columbia

5 and 6 February, 8 pm  
Bears vs University of British Columbia

## POSITIONS

The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities and women.

#### SUPPORT STAFF

To obtain further information on the following positions, please contact Personnel Services and Staff Relations, 2-40 Assiniboia Hall, telephone 492-5201. Due to publication lead time and the fact that positions are filled on an ongoing basis, these vacancies cannot be guaranteed beyond 22 January 1993. For a more up-to-date listing, please consult the weekly Employment Opportunities Bulletin, the postings in PSSR and/or call the Job Information Line at 492-7205 (24 hours). Positions available as of 22 January 1993.

The salary rates for the following positions reflect adjustments in accordance with the new classification system and pay plan.

CLERK TYPIST (Grade 5) (Term to 30 April 1993), Faculty of Nursing (\$1,891 - \$2,343)

CLERK TYPIST (Grade 5), Faculty of Nursing, (\$1,891 - \$2,343)

SENIOR COORDINATOR (MANAGER, SPECIAL REGISTRATIONS) (Grade 9), Office of the Registrar (\$2,636 - \$3,343)

The following positions retain salary rates in accordance with the previous classification system and pay plan.

LABORATORY ASSISTANT III (Trust/ Term to 30 June 1993/Part-time), Surgery, (\$913 - \$1,146) (prorated)

PROGRAMMER ANALYST II (Trust/ Term to 1 Feb 1994), Computing Science (\$2,692 - \$3,497)



#### ACCOMMODATIONS AVAILABLE

VICTORIA PROPERTIES - Experienced, knowledgeable realtor with Edmonton references will answer all queries, and send information. No cost or obligation. Call (604) 595-3200, Lois Dutton, Re/Max, Ports West, Victoria, BC.

SHARE - Idlewylde home with two other people. \$270/month plus utilities. Janet/Mike, Western Relocation Services, 434-4629.

RENT - May-July, fully furnished three bedroom house, south Garneau. \$1,200/month. 438-7886, 492-5731.

RENT - Old Strathcona, three bedroom, furnished main floor suite. Hardwood floors, utilities included, available immediately. 434-6287.

MICHENER PARK - Two bedroom rowhouses and apartments for rent in University residence located in southwest Edmonton. Excellent bus service to University, utilities included. All enquiries welcome, 492-7044.

RENT - Two storey, three bedroom home in north Windsor Park. Two blocks west of the University. Available to rent 1 February, 433-0646.

SALE - Elegant, four bedroom family home. Super location in old Riverbend, easy access University. Triple garage, west yard, vendor relocating. Val Cload, Spencer Realty, 435-0808.

SALE - Executive, hillside bungalow, old Riverbend. Totally redone, stunning contemporary decor, 4,100'. Sherry Mailo, Re/Max, 438-7000.

SALE - Belgravia bungalow, 1,300', totally redone. Interior, exterior. Excellent curb appeal and location. Sherry Mailo, Re/Max, 438-7000.

SALE - Belgravia bungalow, two bedrooms, vinyl siding, new oak kitchen. \$117,500. Sherry Mailo, Re/Max, 438-7000.

SALE - Riverbend, city view, 1 1/2 storey. Newly constructed Whitemud Hills. Bright, modern. Sherry Mailo, Re/Max, 438-7000.

RENT - Laurier, furnished, three bedrooms, 2 1/2 baths, family room, den, finished basement, double garage. July 1993 - twelve months. Near school (1-9). 15-minute drive University/downtown. \$1,500/month. 483-0960.

SALE - Exceptional Belgravia bungalow, two bedrooms, bright, modern kitchen, newer basement development, south yard, deck. Great location. \$154,900. Ed Lastiwka, Royal LePage Realty, 446-3800, 437-7480.

SALE - University area condo. Quiet, immaculate, neutral, living/dining with fireplace, den/bay window, kitchen with eating, two bedrooms, baths. Secured parking. \$154,800. Offers. Open Saturday/Sunday, 1-4. 431-1179.

## Catherine M. Fletcher D.D.S.

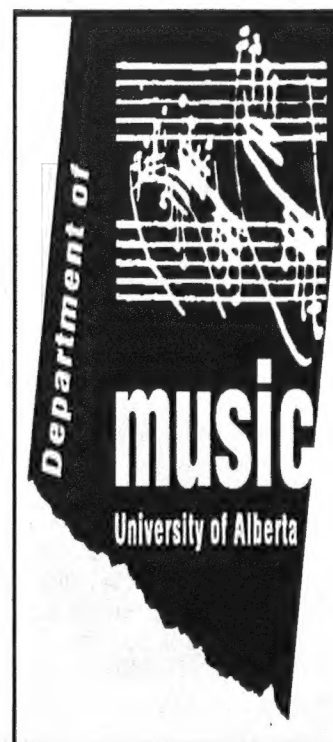
#### DENTIST

#980, 8215-112 Street  
College Plaza 3  
Edmonton, Alberta  
T6G 2C8

439-2266

#### Our hours are:

Mon. 9am - 5pm  
Tues.-Fri. 8am - 4pm



Sat., February 6, at 8 pm  
Faculty in Concert: Helmut Brauss, piano, with the ESO in the Jubilee Auditorium.

Sun., February 7, at 8 pm  
Kilburn ENCOUNTERS IV in Convocation Hall, Arts Bldg.

Tues., February 9, at 8 pm  
Faculty Recital: Fordyce Pier, trumpet, in Convocation Hall, Arts Bldg.

Wed., Feb. 10, at 12:10 pm  
Noon-Hour Organ Recital in Convocation Hall, Arts Bldg.

Fri., February 12, at 8pm  
Visiting Artist Recital: Antonin Kubalek, piano, in Convocation Hall, Arts Bldg.

Info: Dept. of Music: 492-3263.



RENT - Furnished, bachelor, private home. Phone, cable, utilities, bus, jogging trails. Nonsmoker, references, \$340. 438-0883.

RENT - New, three bedroom raised bungalow near University. Available 1 March. 436-0931.

SALE - Norfolk on Whyte, very well maintained condominium. Two bedrooms, 1 1/2 baths, five appliances included. Walk to the University, quick access to downtown. \$92,500. Marjorie King, Spencer Realty, 435-0808, 435-0395.

SALE - \$210,000 is the price of this custom-built home. Fully developed basement - large windows, underfloor heating, double garage. Quiet location near the "Drive". Marjorie King, Spencer Realty, 435-0808, 435-0395.

SALE - Saskatchewan Drive, spacious, 1,905 square foot, three bedroom plus den bungalow. Fully finished basement, intercom, security alarm, wine cellar. Walk to University. Joan Lynch, Re/Max Real Estate, 438-7000, 433-9025.

RENT - Walk to University. Two bedroom executive townhouse, five appliances, fireplace, heated parking. \$895/month. 481-3513 or 468-4060.

RENT - Two bedroom suite in house. Newly renovated, bright, cheerful, large windows, oak floors, extremely quiet, suitable for professional. Walk to University. \$475 plus utilities. Georgina, 424-2317, 433-1479.

#### ACCOMMODATIONS WANTED

MATURE, UNIVERSITY EMPLOYEE available to housesit. Previous experience. Phone Joanna, 433-8668 or 492-6365.

MATURE, PROFESSIONAL COUPLE - (University employee), nonsmokers, willing to housesit. Minimum six months. Phone 438-6720.

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MARK EHRMAN CABINET SERVICES - Custom designs or made to match existing. References available. 463-0889.

TECH VERBATIM - Word processing, WP 5.1, Words 5.0, medical terminology, laserprint, campus location. Donna, 440-3714 evenings, weekends.

MARY ROBERTSON WORDPROCESSING - Laser printer. Twenty years' legal experience. 452-4665.

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## Canadian Identities in an Era of Globalization

February 4 & 5, 1993

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THURSDAY, FEBRUARY 4TH

### "Globalization: Winners and Losers" (1300 - 1500)

Duncan Cameron - *Political Science, University of Ottawa*  
Michael Percy - *Economics, University of Alberta*

### "Citizenship and Democracy in a Global Economy"

(1530 - 1730)

Roger Smith - *Business, University of Alberta*  
Gordon Laxer - *Sociology, University of Alberta*

### "Constructing Canadian Identities" (1930 - 2130)

Public Event: This session only will be held in Education North 2-115

Olive Dickason - *History, University of Alberta*  
Christian Dufour - *Political Science, Université Laval*  
Kenneth McRoberts - *Director, Roberts Centre for Canadian Studies, York University*

FRIDAY, FEBRUARY 5TH

### "The Global Village and Cultural Survival" (1000 - 1200)

Colin Hoskins and Stuart McFadyen - *Business, University of Alberta*  
Jane Ash Poitras - *Painter, Native and Public Activist, Edmonton*

### "Equality and the Politics of Difference" (1315 - 1515)

Susan Jackel - *Canadian Studies Program, University of Alberta*

Registration: \$10.00 / Students: NO CHARGE

TO REGISTER, WRITE OR CALL:

Gordon Laxer, Canadian Studies Program, Trailer Complex One,  
University of Alberta, Edmonton, Alberta T6G 2E1  
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